


Curriculum Vitae

1- Personal Information

Name	Prof. Dr. Khalid H. Rashid	
Affiliation	Chemical Engineering Department, Chemical Engineering & Oil Pollution Branch, University of Technology	
Mailing Address	Chem. Eng. Dep., University of Technology, Alsinaa Street No. 52, P.O. Box 35010, Baghdad-Iraq	
Mobile	+9647700733818	
Email	khalid.h.rashid@uotechnology.edu.iq alhadidikhalid@yahoo.com	
Date of Birth	8 December 1965	
Place of Birth	Baghdad / Rusafa	
Nationality	Iraqi	
Marital Status	Married, Three Children	

2- Scientific Rank

Assistant Professor

Date of obtaining the Scientific Title: 12/9/2021

3- Research Area Interest

Corrosion Engineering and Protection Methods Use of Inhibitor to Reduce Corrosion Rates, Chemical Reaction Kinetics, Chemical Engineering, Thermodynamic Science, Quantum Chemistry, Optimization, Nanotechnology.

Further information can be found at:

<https://www.scopus.com/authid/detail.uri?authorId=57205068504>

https://scholar.google.com/citations?hl=en&user=63wHAaAAAAAJ&view_op=list_works&sortby=title&gmla=AJsN-F5dDfD8Aou3LkkQdaxC4mKs6k5cBHTWGF1KGuzXb9Neim4Hy93UA_zbFVKQd1oYX-5c5QGqm5zeqZ8wyKLE0aNigP43m2GMAthqHy7RMQcc_jKYwk&sciund=16081488134205313706&gmla=AJsN-F68LD8ZdqkjsvUISuM8DqcPTrYDVbRz4_tpd_l-q1RTIt7itm2TGu6eP7GXgd7V6b-97V24X4WfQhYonxEJqh7S7VWkwaw20zLzNQQu0FYuugRJ2PMA&sciund=11765293315372973908

https://www.researchgate.net/profile/Khalid_Rashid11

<https://publons.com/researcher/1427573/drkhaldid-h-rashid/>

<https://www.mendeley.com/profiles/khalid-h-rashid/>

<https://www.linkedin.com/in/khalid-rashid-49660a200>

https://www.researchgate.net/profile/Khalid_Rashid11

<https://publons.com/researcher/1427573/drkhaldid-h-rashid/>

<https://www.mendeley.com/profiles/khalid-h-rashid/>

<https://www.linkedin.com/in/khalid-rashid-49660a200>

4- Education

Date	Discipline	Degree	Institution	
15 th Oct. 1988	Chemical Engineering	B. Sc	University of Baghdad, College of Engineering, Chemical Engineering Department	Final year Project : Ethylene Glycol Production Plant
28 th July. 2004	Anodizing and Chemical Conversion Coating	M. Sc	University of Baghdad, College of Engineering, Chemical Engineering Department	Thesis Title Anodizing of Aluminum ASA 6061 Using Chromic Acid
4 th Sep. 2014	Corrosion & its relation to the Transport Phenomena	Ph. D	University of Baghdad, College of Engineering, Chemical Engineering Department	Thesis Title : Corrosion Behavior of Carbon Steel in CO ₂ - Containing Oilfield Produced Water

5- Management Posts

- Member of the Branch Council of the Engineering of Pollution Engineering and Chemical Engineering 2016 – to date

6- Academic Experience

1- Undergraduate Level

- Mechanical Engineering & Strength of Materials (2014-2017)
- Corrosion Engineering (2016-to date)
- Mathematics (2016-2017)
- Industrial Engineering & Management (2017-2018)

- Environmental Devices and Analysis (2017-2018)

2- Postgraduate Level

- Corrosion Engineering (2017-to date)
- He supervised and discussed many master's and doctoral dissertations in his field of specialization

7- Courses which invasion inside Country

- Participated in Industrial Safety and Application it, State Co. of Electrical Industries, 7 – Days, 2 - 8 January 1989
- Paints Technology, Specialized Institute of Geometrical Industries, 6 – Days, 25 - 30 March 1995, Third on the course 89% Very Good
- Participated in Water Treatment Systems in Electrical Energy Generating Stations, General Committee For Training and Apprenticeship Al-Waziriyah, 14 – Days, 1 - 15 July 1996
- Participated in Methods of Studying and Training, General Committee For Training and Apprenticeship Al-Waziriyah, 6 – Days, 1 - 6 August 1997
- Apprenticeship to Qualification Examination / English Language, Languages College / University of Baghdad / The Consultant Office, 30 – Days, 7/8 - 9/9/1999, Successful in Succession 53 – 60
- Requirements of Administration Quality System ISO 9001-2000, General Company 17-April, 6 – Days, 20 - 25 January 2001, 1st on Course 90% Excellent
- Methods of Training and Development for Workers, College of Engineering/ University of Baghdad/Continuous Education Center, 6 – Days, 7-12 July 2001, 79% Good
- Apprenticeship for Higher Studies Students, University of Baghdad / Computer Center, 15-Days, 15/6 - 3/7 2002, Successful Only
- Apprenticeship for Higher Studies Students, University of Baghdad / Computer Center, 15-Days, 5/3 - 23/3 2005, Successful Only
- Methods of Studying, University of Technology /Continuous Education Center, 15-Days, 20/6 – 4/7/2010, Successful and appreciated Very Good
- Participated in The role of the virtual library in the development of scientific research, University of Technology – Iraq, 1-Day, 2012
- Participated in Catalyst Production Techniques in the field of Chemical Industry and Oil Refining, University of Baghdad-College of Engineering-Chemical Engineering Department, 1-Day, 28/5/2013
- Participated in Heterogeneous Reactions and the Role of Catalyst in the Design of Chemical Reactors, University of Technology – Iraq, 1-Day, 2013
- Participated in Seminar on the reality of the Iraqi cement industry and the prospects for its development, University of Technology – Iraq, 1-Day, 2013
- Participated in Seminar on quality between reality and ambition, University of Technology – Iraq, 1-Day, 2013
- Participated in Scientific seminar entitled (The role of scientific research in improving the quality of education and academic performance), University of Technology – Iraq, 1-Day, 2013
- Participated in Scientific seminar entitled (Chemistry and Chemical Engineering at the service of sustainable development), University of Technology – Iraq, 1-Day, 2013
- Participated in Seminar on Safety and security chemotherapy session, University of Technology – Iraq, 1-Day, 2014
- Participated in Modern Trends in the Quality of the Planning of University Scientific Method in Accordance with the Needs of the Labor Market and to Improve the Quality of Educational Outcomes, University of Technology – Iraq, 1-Day, 29/12/2014
- Participated in Future Prospects for the Development of the Oil Industry in Iraq, The Conference room at the Department of Control and Systems Engineering/ University of Technology/ Iraq, 1-Day, 6/4/2015
- Participated in Evaluation of Scientific Research Plan for the Company Midland Refineries Path and Strengthened with the Academic Side, Training Department Hall/Midland Refineries Company/ Baghdad/Iraq, 1-Day, 16/4/2015
- Participated in Intelligent Systems in Industry and Energy Sector, University of Technology -Electrical Engineering Department- Iraq, 1-Day, 20/4/2015
- Participated in the impact of industrial pollutants on water activities and modern techniques in the treatment, University of Technology -Chemical Engineering Department- Iraq, 1-Day, 27/10/2015, No. 3631 in 10/12/2015
- Participated in Evaluating the Phases of the Development of the Academic Track of the Department of Chemical Engineering on the Occasion of the Fortieth Anniversary of its Foundation, University of Technology -Chemical Engineering Department- Iraq, 1-Day, 23/2/2016
- Participated in the Workshop (The Importance of ISO 17025 in the Organization of the Work of Food Safety Laboratories), University of Baghdad/ Market Research & Consumer Protection Center, which was held in the period 10-11/5/2016, No. 350 in 23/5/2016
- Participated in the Workshop (Research Centers and their Role in Ranking Universities According to International Classifications), University of Baghdad/ Market Research & Consumer Protection Center, 1-Day, 26/10/2016, No. 633 in 27/10/2016
- Participated in the lecture entitled (Magnetization Equipment Project) for the Incubator of R&D Technology, which was held on the hall of the National Center for Packaging and Packaging/ Industrial Research and Development Authority/ Ministry of Industry and Minerals on 26/10/2016, No. 5402 in 18/12/2016
- Participated in Scientific Symposium (Strategy and Management of Electrical Power in Iraq), Department of Electrical Engineering, University of Technology – Iraq, 1-Day, 13/4/2017, No. 893 in 25/4/2017
- Participated in the Scientific Symposium titled (Application of Modern Electronics) Established by the Branch of Optical Electronics Engineering, Department of Laser and Optical Electronics Engineering on 13/4/2017, No. 729 in 15/5/2017

- Member of the Preparatory Committee in the Scientific Symposium titled (Environmental Treatment between Reality and Ambition) Established by the Branch of Chemical Engineering and Environmental Pollution, Department of Chemical Engineering on 13/4/2017, No. 283 in 2/2/2017

8- Permanent Committees

- Member of the Absences Committee in Chem. Eng. Dept., 2010
- Chairman of Committee of the Cultural and Extracurricular Activity, 2011
- Member of Committee to Application and Operation of Modern Devices in Industrial Units Laboratory, 2011
- Member of Committee to Receive and Determine the Technical Specifications of the Devices, 9/2014
- Member of Committee and the Committee of the Hardware Inventory Laboratories, 550 in 2/12/2014
- Chairman of Committee of the Summer Training (2014 – 2015), 363 in 11/8/2015 as of 10/8/2015
- Chairman of Committee of the Summer Training (2015 – 2016), 413 in 16/9/2015
- Member of the University Committee for Summer Training (2015–2016), 10868 in 4/11/2015
- Member of the University Committee for Summer Training (2015–2016), 516 in 13/1/2016
- Chairman of Committee of the Summer Training (2016 – 2017), 345 in 27/9/2016
- Member of the University Committee for Summer Training (2016–2017)
- Chairman of Committee to Receive and Determine the Technical Specifications of the Devices, 201 in 10/4/2017

9- Temporary Committees

- Chairman of Committee of the Delivery and Receipt Edema of Industrial Units Laboratory, 7/3/2011
- Member of Commission Assigning Exam Computer Efficiency for Applicants for Graduate Studies, From 9/9/-10/9/2014
- Member of Committee for Valuing Donated Books to the Library Section, 2015
- Member of the Committee Monitoring the Preparatory Exam for Admission to Medical Colleges Group, 1938 in 3/9/2015
- Member of the Committee's Conference Annual Scientific graduation Projects and Summer Training and Communication with Graduates for students of primary studies, 545 in 15/3/2016
- Member of the Holding Committee for the preparation of data and evidence on the criteria of the national classification on the Quality of Iraqi Universities for the Department of Chemical Engineering for the Academic year 2015–2016 According to the Five Axes to Measure the Degree of Performance of Scientific Departments in Government Colleges, 41 in 18/1/2017
- Member of the Preparatory Committee for the Symposium Entitled (Environmental Treatment Between Reality and Ambition in Cooperation with the Ministry of Environment, 283 in 2/3/2017

10- Employment History

- 1984–1988 Undergraduate Student in the Chemical Engineering Department, College of Engineering, University of Baghdad, Iraq
- 1988–1991 Worked at the General Company of Electrical Industries, Ministry of Industry and Minerals, Chemical Engineer, Head of Electroplating and Painting Division, Baghdad, Iraq.
- 1992–1994 Worked at the Al-Nhrieyn Center for Specialist Printing, Ministry of Industry and Minerals, Chemical Engineer, Head of Chemicals and Inks Division, Baghdad, Iraq.
- 1995–1999 Worked at the Training Central for Electrical Industries General Committee for Training of Apprenticeship, Al-Waziriyah, Ministry of Industry and Minerals, Chemical Engineer, Lecturer, Baghdad, Iraq.
- 2000–2001 Worked at the Traffic Marks Manufacturing Factory, General Al-Sumood Company, Ministry of Industry and Minerals, Assistant Chief Engineer, Head of Production Department, Baghdad, Iraq.
- 2002–2004 M.Sc. Postgraduate Student in Chemical Engineering Department, University of Baghdad, Iraq
- 2005–2010 Worked As Assistant Lecturer at the Chemical Engineering Department, University of Technology, and Baghdad, Iraq.
- 2011–2014 Ph.D. Postgraduate Student at the Chemical Engineering Department, University of Baghdad, Iraq
- 2014–Present Worked at the Chemical Engineering Department, University of Technology, and Baghdad, Iraq.

11- Lab Supervision

- Chemical Process Industries
- Industrial Units Laboratory
- Control and Measurements Laboratory
- Physical Chemistry Laboratory
- Environmental Pollution Measurement Laboratory

12- License/Certification

- Member of Iraqi Engineers Syndicate (in Consultative status since 4/10/2015)
- Member of the Iraqi Scientific Association of Engineers (type of membership factor)
- Member of the Office of Scientific and Engineering Consultations of the University of Technology.
- Member of many scientific committees affiliated to industrial companies and productivity in the government sector, mixed and private.

13- Skills and Qualifications (Language and Computer)

- Language Abilities: English, Arabic
- Very Good With Computers, And Many Programs like: Excel, Word, Power Point, Mails, Internet, Etc.

14- Publications/ Books

1- Supervision

1. Corrosion Inhibition of mild steel in CO₂ Saturated Brine, M.Sc. Thesis 2021
2. Synthesis and Investigations of Organic Corrosion Inhibitors for Mild Steel in Hydrochloric acid Solution, M.Sc. Thesis 2022
3. Synthesis and Characterization of New Heterocyclic Compounds Containing Oxazolidine Ring as Corrosion Inhibitors for Mild Steel in Acidic Solution, M.Sc. Thesis 2023
4. Synthesis and characterization of some new heterocyclic compounds containing β – lactam ring as corrosion inhibitors for mild steel in acidic solution, M.Sc. Thesis 2024

2- Published Researches

Published more than 50 research and scientific studies in the engineering of corrosion in Iraq and abroad. He provided a lot of successful engineering consultancy to many industrial companies to deal with industrial problems in the field of corrosion and control.

1. **Khalid H. Rashid**, Aprael S. Yaro & Muslet Sh. Hussain, “Electrochemical behavior of Chemical Conversion Coated Aluminum ASA 6061 in Chromic Acid”, Iraqi Journal of Chem. & Pet. Eng. (I.J.C.P.E), Vol. 8, No. 3, (Sep. 2007), pp. 49-52.
2. **Khalid H. Rashid**, “Electrochemical Behavior of Chemical Conversion of Coated Aluminum 1100Al in a Neutral Tartrate Solution”, Iraqi Journal of Engineering & Technology (I.J.E.T.), Vol. 28, No.18, (2010), pp. 5640- 5650.
3. **Khalid H. Rashid** & Talib M. Albayati, “Comparative Study for Anodizing Aluminum Alloy 1060 by Different Types of Electrolytes Solutions”, Iraqi Journal of Engineering & Technology (I.J.E.T.), Special Number of First Scientific Conference on Modern Technologies in Oil & Gas Refining-Chemical Eng. Dept., University of Technology and Midland Refineries Company, (April 2011) 25-27.
4. **Khalid H. Rashid** & Aprael S. Yaro, “Modelling and Optimization of Carbon Steel Corrosion in CO₂ Containing Oilfield Produced Water in Presence of HAc”, Iraqi Journal of Chem. & Pet. Eng. (I.J.C.P.E.), Vol. 16, No. 2, (June 2015), pp. 1-8.
5. **Khalid H. Rashid**, Aprael S. Yaro and Anees A. Khadom, “Effect of CO₂ corrosion behavior of mild steel in oilfield produced water”, Journal of Loss Prevention in the Process Industries, Vol. 38, (2015), pp. 24-38. <http://dx.doi.org/10.1016/j.jlp.2015.08.003>
6. **Khalid H. Rashid**, “Determination of the Optimum Conditions in Evaluation of Kiwi Juice as Green Corrosion Inhibitor of Steel in Hydrochloric Acid”, Iraqi Journal of Engineering (I.J.E.), Vol. 21, No. 8, (Aug. 2015), pp. 22-39.
7. **Khalid H. Rashid**, “Effect of Acetic Acid on Electrochemical Behavior of Sealed AA2319- T3 Al-Alloys Anodized in Phosphoric Acid Electrolytes”, Iraqi Journal of Al-Khwarizmi Eng. (I.J.Kh.E.), Vol. 11, No. 4, (Dec. 2015), pp. 1-7.
8. **Khalid H. Rashid**, Zaidoon M. Shakor & Ayad B. Ahmed, "Modelling and Optimization of Corrosion Inhibition of Mild Steel in Phosphoric Acid by Red Pomegranate Peels Aqueous Extract”, Iraqi Journal of Engineering (I.J.E.), Vol. 23, No. 11, (Nov. 2017), pp. 33-50.
9. Anees A. Khadom and **Khalid H. Rashid**, “Adsorption and Kinetics Behavior of Kiwi Juice as a friendly Corrosion Inhibitor of Steel in Acidic Media”, World Journal of Engineering, Vol. 15, No. 3, 2018, pp.388-401. <https://doi.org/10.1108/WJE-08-2017-0246>
10. **Khalid H. Rashid**, “Electrochemical Behavior of C6.9 Mild Steel Corrosion Inhibition in Phosphoric Acid Using Extracted Aqueous of Red Pomegranate Peels”, Association of Arab Universities Journal of Engineering Sciences, Vol. 25, No. 3, 2018, pp.216-233.
11. **Khalid H. Rashid** and Anees A. Khadom, “Evaluation of Environmentally Friendly Inhibitor for Corrosion of Mild Steel in Phosphoric Acid Solution: Unconventional approach”, Anti-Corrosion Methods and Materials, Vol. 65, No. 5, 2018, pp. 506-514. <https://doi.org/10.1108/ACMM-06-2018-1955>
12. **Khalid H. Rashid** and Anees A. Khadom, “Optimization of Inhibitive Action of Sodium Molybdate (VI) for Corrosion of Carbon Steel in Saline Water Using Response Surface Methodology”, Korean Journal of Chemical Engineering, Vol. 36, No.8, August 2019, pp. 1350-1359. <https://doi.org/10.1007/s11814-019-0291-1>
13. **Khalid H. Rashid** and Anees A. Khadom, “Mathematical Modeling and Electrochemical Behavior for Corrosion Inhibition of Steel by Kiwi Juice Extract”. Journal of Bio-and Tribo - Corrosion, Vol.6, No.1, December 2019, pp. 1-8. <https://doi.org/10.1007/s40735-019-0312-y>
14. **Khalid H. Rashid** and Anees A. Khadom, “Sodium sulfite as an oxygen scavenger for the corrosion control of mild steel in petroleum refinery wastewater: optimization mathematical modeling, surface morphology and reaction kinetics studies”. Journal of Reaction Kinetics, Mechanisms, and Catalysis, Vol.129, No. 2, 2020, pp. 1027-1046. <https://doi.org/10.1007/s11144-020-01738-3>
15. **Khalid H. Rashid**, Anees A. Khadom and Hameed B. Mahood, “Aluminum ASA 6061 Anodizing Process by Chromic Acid Using Box-Wilson Central Composite Design: Optimization and Corrosion Tendency”, Journal of Metals and Materials International, Vol. 27, 2021, pp. 4059-4073. <https://doi.org/10.1007/s12540-020-00762-1>

16. **Khalid H. Rashid** and Anees A. Khadom, “3-Methoxypropyl-amine as Corrosion Inhibitor for X80 Steel in Simulated Saline Water”, *Journal of Molecular Liquids* Vol. 319, 14 September 2020, pp. 1-14
17. **Khalid H. Rashid**, Anees A. Khadom, Hameed B. Mahood, Alasdair N. Campbell, “The Effect of Mass Transfer on Corrosion in Oilfield Production Processes by Wastewater Enriched with CO₂: Computer-Aided Modeling and Experimental Verification”, *Journal of Case Studies in Chemical and Environmental Engineering*, Vol. 2, 28 July 2020, pp. 1-9. <https://doi.org/10.1016/j.cscee.2020.100030>
18. Wasan F. Hameed, **Khalid H. Rashid**, Anees A. Khadom, “Optimization of inhibition performance of hexa methylene tetra amine for corrosion of mild steel in CO₂ - saturated brine produced water”, *AIP Conference Proceedings Journal (SCOPUS)*, Vol. 2443, 030047, 2022, pp. 1-12. <https://doi.org/10.1063/5.0091899>
19. **Khalid H. Rashid** and Anees A. Khadom, “Sulfosalicylic/Oxalic acid anodizing process of 5854 aluminum-magnesium alloy: Influence of sealing time and corrosion tendency”, *Journal of Results in Chemistry*, Vol. 4, No. 100289, 2022, pp. 1-9. <https://doi.org/10.1016/j.rechem.2022.100289>
20. Wasan F. Hameed, **Khalid H. Rashid**, Anees A. Khadom, “Investigation of Tetraazaadamantane as Corrosion Inhibitor for Mild Steel in Oilfield Produced Water Under Sweet Corrosive Environment”, *Journal of Bio-and Tribo - Corrosion*, Vol. 8, No.27, December 2022, pp. 1-19. <https://doi.org/10.1007/s40735-021-00626-0>
21. **Khalid H. Rashid**, “Evaluation of new green inhibitors against corrosion for steel alloys in the acidic environments”, The international scientific award in gold medal with the international certificate in the first international event in Iraq for the year 2019 by EVEREST for development training and the French Association of thinkers, researchers and inventors in France at the headquarters of the European Union of scientists and inventors for my participation in scientific study in Corrosion Engineering in finding solutions to address corrosion problems and protect iron alloys used in the fields of oil industry and the sectors of electricity and industry on 12/3/2019.
22. Wasan F. Hameed, **Khalid H. Rashid**, Anees A. Khadom, “New Developments in Inhibition of the Sweet Environment in a Variety of Corrosive Media”, *Iraqi Journal of Engineering & Technology (I.J.E.T.)*, Vol. 40, No. 9, 2022, pp.1-14.
23. Salman H. Abbas, Younis M. Younis, **Khalid H. Rashid** and Anees A. Khadom, “Removal of methyl orange dye from simulated wastewater by electrocoagulation technique using Taguchi method: kinetics and optimization approaches”. *Journal of Reaction Kinetics, Mechanisms, and Catalysis*, Published online: 07 August 2022, pp. 1-17. <https://doi.org/10.1007/s11144-022-02269-9>
24. **Khalid H. Rashid**, Anees A. Khadom and Salman H. Abbas, “Optimization, kinetics, and electrochemical investigations for green corrosion inhibition of low-carbon steel in 1 M HCl by a blend of onion-garlic leaves wastes”, *Bioresource Technology Reports*, Vol. 19, No. 101194, 2022, pp. 1-9. <https://doi.org/10.1016/j.biteb.2022.101194>
25. Salman H. Abbas, Ali M. Ridha, **Khalid H. Rashid** and Anees A. Khadom, “Biosorption of Congo red dye removal from aqueous solution using fennel seed spent and garlic peel”, *International Journal of Environmental Science and Technology*, Vol. 25, May 2023, pp. 1-14. <https://doi.org/10.1007/s13762-023-04986-7>
26. Khalida F. Al-azawi, Zainab W. Ahmed, Enas H. Ali, Anees A. Khadom, Hiba H. Abraham, **Khalid H. Rashid**, “Synthesis and characterization of (E)-4-(((4-(5-mercapto-1, 3, 4-oxadiazol-2-yl) phenyl) amino) methyl)-2-methoxyphenol as a novel corrosion inhibitor for mild-steel in acidic medium”, *Results in Chemistry*, Vol. 5, No. 100975, May 2023, pp. 1-8. <https://doi.org/10.1016/j.rechem.2023.100975>
27. Ali Sh. Jasim, **Khalid H. Rashid**, Khalida F. AL-Azawi and Anees A. Khadom, “Synthesis of a novel pyrazole heterocyclic derivative as corrosion inhibitor for low-carbon steel in 1M HCl: Characterization, gravimetric, electrochemical, mathematical, and quantum chemical investigations”, *Results in Engineering*, Vol. 15, No. 100573, Aug. 2022, pp. 1-12. <https://doi.org/10.1016/j.rineng.2022.100573>
28. **Khalid H. Rashid**, Anees A. Khadom, Salman H. Abbas, Khalida F. Al-azawi and Hameed B. Mahood, “Optimization studies of expired mouthwash drugs on the corrosion of aluminum 7475 in 1 M hydrochloric acid: Gravimetric, electrochemical, morphological and theoretical investigations”, *Results in Surfaces and Interfaces*, Vol. 13, No. 100165, Nov. 2023, pp. 1-15. <https://doi.org/10.1016/j.rsurfi.2023.100165>
29. Ali Sh. Jasim, Anees A. Khadom, **Khalid H. Rashid** and Khalida F. AL-Azawi, “(3,5-dimethyl-1H-pyrazol-1-yl) (4-((3,4-dimethoxybenzylidene) amino) phenyl) methanone as a novel corrosion inhibitor for low-carbon steel in hydrochloric acid: Synthesis, diagnosis, and application”, *Results in Chemistry*, Vol.4, No. 100569, Oct. 2022, pp. 1-10. <https://doi.org/10.1016/j.rechem.2022.100569>
30. **Khalid H. Rashid**, Khalida F. AL-Azawi, Anees A. Khadom, Ali Sh. Jasim and Mustafa M. Kadhim, “New pyrazole derivative as effective corrosion inhibitor for carbon steel in 1 M HCl: Experimental and theoretical analysis”, *Journal of Molecular Structure*, Vol. 1287, No. 135661, Apr. 2023, pp. 1-24. <https://doi.org/10.1016/j.molstruc.2023.135661>
31. Zena I. Jasim, **Khalid H. Rashid**, Khalida F. AL-Azawi and Anees A. Khadom, “Synthesis of Schiff-Based Derivative as a Novel Corrosion Inhibitor for Mild Steel in 1 M HCl Solution: Optimization, Experimental, and Theoretical Investigations”, Vol.9, No.54, Jun. 2023, pp. 1-20. <https://doi.org/10.1007/s40735-023-00774-5>
32. Zena I. Jasim, **Khalid H. Rashid**, Khalida F. AL-Azawi and Anees A. Khadom, “Optimization of the corrosion inhibition performance of novel oxadiazole thione-based Schiff base for mild steel in HCl media using Doehlert

experimental design”, Inorganic Chemistry Communications, Vol. 160, No. 111911, Dec. 2023, pp. 1-20. <https://doi.org/10.1016/j.inoche.2023.111911>

33. **Khalid H. Rashid**, Anees A. Khadom and Lei Guo, “The inhibition effect of 1, 3-diazole glyoxaline on corrosion of API 5L X52 pipeline steel in oilfield produced water under sweet corrosive conditions”, Results in Chemistry, Vol. 7, No. 101528, Apr. 2024, pp. 1-16. <https://doi.org/10.1016/j.rechem.2024.101528>
34. Zena I. Jasim, **Khalid H. Rashid** and Anees A. Khadom, “Corrosion and Corrosion Control of the Steel in Acidizing Oil Wells Processes: An Overview of Organic Inhibitors”, Russian Journal of Applied Chemistry, Vol. 97, No. 1, Jun. 2024, pp. 1-19. <https://doi.org/10.1134/S1070427224010063>

1. الأستاذ الدكتور خالد حامد رشيد / أختصاص هندسة التآكل و ظواهر الانتقال / قسم الهندسة الكيماوية / الجامعة التكنولوجية , دراسة علمية (دراسة مُشكلة التآكل في أنابيب الماء و البخار و المراحل البخارية و بيان أسبابها و سبل معالجتها لزيادة العمر التشغيلي لها) دراسة علمية منفردة عن زيارتي لمحطة الدورة الحرارية مقدمة الى الشركة العامة لإنتاج الطاقة الكهربائية / المنطقة الوسطى/ قسم الوقود والمعالجة في الشركة بتاريخ 2019/3/3. وتم تأييد الاستفادة العلمية من قبل الشركة حسب كتابهم المرقم 30512 في 2019/9/15 وتوجيه كتاب شكر و تقدير من قبل الشركة أعلاه حسب الأمر الإداري المرقم 11803 في 2021/5/18

2. الأستاذ الدكتور خالد حامد رشيد / أختصاص هندسة التآكل و ظواهر الانتقال / قسم الهندسة الكيماوية / الجامعة التكنولوجية , دراسة علمية هندسية تخصصية عن (التآكل في محطات إنتاج الطاقة الكهربائية و إيجاد الحلول المناسبة له) دراسة علمية منفردة عن زيارتي لمحطة القدس الغازية مقدمة الى الشركة العامة لإنتاج الطاقة الكهربائية / المنطقة الوسطى / قسم الوقود والمعالجة في الشركة كجزء من التعاون العلمي المشترك بين الجامعة التكنولوجية و مؤسسات الدولة بتاريخ 2019/3/20. وتم تأييد الاستفادة العلمية من قبل الشركة حسب كتابهم المرقم 30512 في 2019/9/15 وتوجيه كتاب شكر و تقدير من قبل الشركة أعلاه حسب الأمر الإداري المرقم 11803 في 2021/5/18

3- Research to be Published:

3- Books

1. Corrosion Behavior of the Carbon Steel in CO₂ Saturated Brine, (ISBN 978-3-330-32497-8), LAP Lambert Academic Publishing, GmbH & Co. Kg Germany, (10 Aug. 2017)

4- Patent

1. Iraqi Patent № 8220, “Synthesis of a new corrosion inhibitor 3, 5-dimethyl-1H-pyrazol-1-yl m (4-((4-hydroxybenzylidene) amino) phenyl) methanone to prevent corrosion of low carbon steel in 1 M hydrochloric acid. International classification: C23F11/10-C07D231/12 (The Republic of Iraq, The Ministry of Planning, Central Organization for Standardization and Quality Control), 21/2/2024

15- Conferences

Participated in many scientific conferences and seminars in Iraq and abroad:

1. Participated in the 1st Scientific Conference for Chemical and Petrochemical Engineering, College of Engineering, University of Tikrit, 28 - 29 November 2000.
2. Participated in the Twenty Chemist Iraqi Conference Convene from Iraqi Chemists Union, Ishtar – Sheraton Hotel, Baghdad, 8 - 10 October 2002.
3. Participated in Research in First Scientific Conference on Modern Technologies in Oil & Gas Refining, Chemical Eng. Department, University of Technology- Iraq, 25 – 27 April 2011.
4. Participated in Second Scientific Conference on Modern Technologies in Oil Refining, University of Technology- Iraq, 2013.
5. Participated in 1st Scientific conference of postgraduate students (Graduate Research in Chemical Engineering and its Impact on the Development of Chemical and Oil Industries Paths), University of Technology- Iraq, 18 – 19 May 2015.
6. Participated in Student Conference Annual Scientific graduation Projects and Communication with Graduates for students of primary studies, University of Technology- Iraq, 2015.
7. Member of the committee supervising the conference in Participated in Student Conference Annual Scientific graduation Projects and Summer Training and Communication with Graduates for students of primary studies, University of Technology- Iraq, 26-4-2016.
8. Participated in the Second Sustainable and Renewable Energy Conference, Society of Iraqi Engineers / Headquarters of the Society for the period from 26 to 27 November 2016, No. 881 in 4/12/2016.
9. Participated in Second Annual Conference of Chemical Engineers, Iraqi Engineers Syndicate / General Center, 14-12-2016.
10. Participated in Iraq Energy Inventions Exhibition / Petroleum Cultural Center / Oil Ministry, Baghdad, 18-19 December 2016.
11. Participated in Scientific Conference of Postgraduate Students, University of Baghdad/ College of Engineering - Iraq, 27 – 28 December 2017.
12. Session Rapporteur in the Second Scientific Conference of Postgraduate Students in Chemical Engineering, University of Technology/ Chemical Engineering Department - Iraq, 10 – 11 May 2017.

13. Member of the Committee of the numbers and supervision of the fifth annual scientific students Conference for graduation projects and summer training and communication with graduates for the year 2016-2017, University of Technology/ Chemical Engineering Department - Iraq, 17 May 2017.

16- Contracts

1. "Anodizing of Aluminum ASA 6061 Using Chromic Acid", (Contract Funding in 3/11/ 2002 by the Ministry of Industry and Minerals, General April 17 Company, Baghdad, 2002).
2. "Economical Design, Quantitative Analysis & Electrochemical Behavior of Carbon Steel in CO₂ – Containing Oilfield Produced Water", (Contract No. 12 in 22/4/ 2012, Funding by the Ministry of Industry and Minerals, General Authority for Industrial Research and Development, Legal Section, Iraq).

17- Honors and Distinctions

- Acknowledgment and Appraisal in Accordance with Document 373 in 20/3/1997, Training Central for Electrical Industries, General Committee for Training and Apprenticeship, Al-Waziriyah.
- Acknowledgment and Appraisal in Accordance with Document 8133 in 6/2/2001, General Al-Sumood Company.
- Acknowledgment and Appraisal in Accordance with Document 1794 in 28/9/2011, Department of Chemical Engineering (Head of Department Office).
- Acknowledgment and Appraisal in Accordance with Document 177 in 29/1/2012, Department of Chemical Engineering (Head of Department Office).
- Acknowledgment and Appraisal in Accordance with Document 860/8 in 22/5/2013, Ministry of Higher Education & Scientific Research (Minister Office).
- Acknowledgment and Appraisal in Accordance with Document 4921 in 16/6/2015, Ministry of Higher Education & Scientific Research (Research & Development).
- Acknowledgment and Appraisal in Accordance with Document 1946 in 3/9/2015, Department of Chemical Engineering (Head of Department Office).
- Acknowledgment and Appraisal in Accordance with Document 711 in 18/10/2015, President of the University of Technology.
- Acknowledgment and Appraisal in Accordance with Document 3635 in 13/12/2015, Department of Chemical Engineering (Head of Department Office).
- Acknowledgment and Appraisal in Accordance with Document 3718 in 21/12/2015, Department of Chemical Engineering (Head of Department Office).
- A certificate of Appreciation for the Efforts of the Summer Training through the Student Conference on Graduation Projects and Summer Training and Communication with Graduates from Department of Chemical Engineering (Head of Department Office). in 26/4/2016.
- Acknowledgment and Appraisal in Accordance with Document 1120 in 1/6/2016, Department of Chemical Engineering (Head of Department Office).
- Acknowledgment and Appraisal in Accordance with Document 1208 in 14/6/2016, Department of Chemical Engineering (Head of Department Office).
- Acknowledgment and Appraisal in Accordance with Document 7203 in 28/7/2016, President of the University of Technology.
- Acknowledgment and Appraisal in Accordance with Document 111 in 4/1/2017, University of Babylon / College of Engineering / (Dean of the College of Engineering).
- Acknowledgment and Appraisal in Accordance with Document 977 in 8/5/2017, Department of Chemical Engineering (Head of Department Office).
- Acknowledgment and Appraisal in Accordance with Document 2498 in 29/11/2018, Department of Chemical Engineering (Head of Department Office).

18- International Scientific Awards with International Certificates

- The international scientific award in gold medal with the international certificate in the first international event in Iraq for the year 2019 by EVEREST for development training and the French Association of thinkers, researchers and inventors in France at the headquarters of the European Union of scientists and inventors for my participation in scientific study in Corrosion Engineering in finding solutions to address corrosion problems and protect iron alloys used in the fields of oil industry and the sectors of electricity and industry on 12/3/2019.

Awarded the international scientific Prize for the professors, academics and researchers (International Golden Medal with international scientific certificate) in the International Event in Iraq for the year 2019 was awarded by the EVEREST Organization Development Training/NGO and the French Society of thinkers, researchers and inventors in France at the headquarters of the European Union of scientists and inventors sponsored by the Society of Computer Science and Artificial Intelligence and Data Protection of the Ministry of Higher Education and Iraqi scientific research in 2019.

- Certificate of Participation and attendance in the Second international festival of invention, innovation and copyright, which was organized by the Pharmacy College at Al Kitab University (4-5/5/2019) and in cooperation with Association of innovators and inventors of Iraq and the participation of the World Intellectual Property Organization (WIPO)

19- Local Scientific Awards with Local Certificates

- Recipient of the Local Award for Academic Professors (Gold Innovation Medal with the Certificate of Local Scientific Participation) from the Future College of the Ministry of Higher Education and Iraqi Scientific Research to participate actively in the graduation projects exhibition held at the Future College. (27-30 April 2019).

- Awarded the shield of excellence for professors, academics and researchers with the certificate of participation of local scientific faculty of the future university affiliated to the Ministry of Higher Education and Iraqi scientific research to participate actively in the participation of the first patent exhibition, which was organized in cooperation between the Society of inventors and innovators of Iraq and the College of Future University for the period (27-30 April 2019) at the ninth annual cultural festival of the establishment of the College.
- Holder of the shield of the first scientific conference with a certificate of participation of local participation from the Department of National University Education of the Ministry of Higher Education and Iraqi scientific research for active participation on 19 April 2018.
- Awarded the Shield of the Third Annual Conference of Chemical Engineers with a certificate of local participation from the Iraqi Engineers Association - Chemical Engineering Department for active participation and outstanding efforts in supporting the conference and enriching its sessions and success on 20/1/2018.